

DIFFERENTIAL OFDM USING MULTIPLE RECEIVER ANTENNAS

ABSTRACT OF THE DISCLOSURE

Systems and methods for optimally receiving differential encoded OFDM signals via multiple antennas. These techniques may exploit spatial diversity without knowledge of channel characteristics. Further systems and methods are provided for exploiting frequency diversity within an OFDM burst where differentially encoded symbols are repeated to assure optimal performance. The output of differential decoding systems may also be used to provide soft decision values for individual bits of multibit symbols to facilitate use of bitwise channel decoding systems.